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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/932,081	08/20/2001	Donald L. Schmidt		5461

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Fairfax, VA 22031

EXAMINER

VARNER, STEVE M

ART UNIT	PAPER NUMBER
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3635

DATE MAILED: 05/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/932,081

Applicant(s)

SCHMIDT, DONALD L.

Examiner

Steve M Varner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 3 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 5-10, are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaughan et al. in view of Doran.

Please see attached Figure 14.

Regarding claims 1, Vaughan et al. shows first (A) and second (B) insulating panels formed from expanded foam (Col. 5, Line 1-10). (Fig. 14) Vaughan et al. teaches tie brackets (1100) spanning the first (A) and second (B) insulating panels which form a void such that a plurality of spaced apart posts (formed in C), a plurality of spaced apart beams (formed in D), and a plurality of webs (formed in E) are formed when the void is filled with poured concrete and the concrete cures. Vaughan et al. teaches a first interlocking member (F) and a second interlocking member (G). (Fig. 14)

Vaughan et al. does not show principally flat surfaces comprising a series of male extensions protruding therefrom. Doran shows a principally flat surface (104) comprising a series of male extensions (120) protruding therefrom. (Fig. 11) It would have been obvious to one of ordinary skill in the art at the time the present invention was made to have a flat surface as in Doran in the structure of Vaughan et al. to add strength to the wall system while reducing concrete usage.

Regarding claim 2, Vaughan et al. shows the basic claimed structure. Vaughan et al. does not show the series of protrusions of the first and second interior surfaces are substantially rectilinear and face one another in an opposing manner such that the posts and beams are parallelepipeds joined at their intersections. Doran shows the series of protrusions (120) of the first and second interior surfaces are substantially rectilinear and face one another in an opposing manner such that the posts and beams are parallelepipeds joined at their intersections. (Fig. 11) It would have been obvious to one of ordinary skill in the art at the time the present invention was made to use rectilinear protrusions making parallelepipeds as in Doran in the structure of Vaughan et al. to add strength to the wall system while reducing concrete usage.

Regarding claim 5, Vaughan et al. shows the tie bracket (1100) adjacent to the proximal end of the first insulating panel (A) and vertically longitudinally oriented. Vaughan et al. teaches a vertical centerline spaced apart from said proximal end of the first insulating panel (A). Vaughan et al. does not teach this spacing. It would have been an obvious design choice to make the spacing a distance interval which is greater than two inches and less than one foot to provide adequate cover for the ties.

Vaughan et al. shows the tie bracket to be a unitary structure having flat plates (1450) on either end embedded in and extending the full height of the first and second insulating panels (A, B). (Fig. 14)

Regarding claim 6, Vaughan et al. shows the basic claimed structure. Vaughan et al. does not teach the vertical center line spaced apart from the proximal end of the first insulating panel as a whole number multiple of measurements of one half foot. It

would have been an obvious design choice to space the vertical center lines apart from the proximal end of the first insulating panel at a whole number multiple of measurements of one half foot to provide adequate cover to the ties.

Regarding claim 7, Vaughan et al. reveals the basic claimed structure. Vaughan et al. reveals one tie bracket (1100) including a plurality of tie brackets each having a centerline spaced apart from the vertical centerline of every adjacent tie bracket. (Fig. 14) Vaughan et al. does not state this spacing to be a whole number multiple of measurements of one foot. It would have been an obvious design choice to make this spacing a whole number multiple of measurements of one foot to provide periodic connection between the forms.

Regarding claim 8, Vaughan et al. reveals the basic claimed structure. Vaughan et al. shows the centers of the interlocking members spaced apart. (Fig. 14) Vaughan et al. does not show this distance as a foot. It would have been an obvious design choice to make this distance a foot.

Regarding claim 9, Vaughan et al. shows the basic claimed structure. Vaughan et al. does not show each interlocking member greater than one inch in length. It would have been an obvious design choice to make the interlocking member greater than one inch in length to provide adequate connection between the forms.

Regarding claim 10, Vaughan et al. shows the forms are straight. (Fig. 4)

Claims 4, 13, 14, are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaughan et al. in view of Doran in view of Horobin.

Vaughan et al. in view of Doran shows the basic claimed structure. Vaughan et al. in view of Doran does not show the first interlocking member is a male interlocking member and the second interlocking member is a female interlocking member wherein the upper surface of the first and second insulating panel have a series of male projections and the lower surface of the first and second insulating panel have a series of corresponding female notches. Horobin shows the first interlocking member is a male interlocking member (43) and the second interlocking member is a female interlocking member (46) wherein the upper surface of the first and second insulating panel have a series of male projections (43) and the lower surface of the first and second insulating panel have a series of corresponding female notches (46). It would have been obvious to one of ordinary skill in the art at the time the present invention was made to use male projections and female notches as in Horobin in the structure of Vaughan in view of Doran to connect the forms.

Regarding claim 13, Vaughan et al. shows first (A) and second (B) insulating panels formed from expanded foam (Col. 5, Line 1-10). (Fig. 14) Vaughan et al. teaches tie brackets (1100) spanning the first (A) and second (B) insulating panels which form a void such that a plurality of spaced apart posts (formed in C), a plurality of spaced apart beams (formed in D), and a plurality of webs (formed in E) are formed when the void is filled with poured concrete and the concrete cures. Vaughan et al. teaches a first interlocking member (F) and a second interlocking member (G). (Fig. 14)

Vaughan et al. does not show principally flat surfaces comprising a series of male extensions protruding therefrom. Doran shows a principally flat surface (104)

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comprising a series of male extensions (120) protruding therefrom. (Fig. 11) It would have been obvious to one of ordinary skill in the art at the time the present invention was made to have a flat surface as in Doran in the structure of Vaughan et al. to add strength to the wall system while reducing concrete usage.

Vaughan et al. does not show the tie bracket is adjacent to the proximal end of the first insulating panel and the vertical centerline of the tie bracket adjacent the proximal end is spaced apart from the proximal end by a distance interval of six inches. Vaughan et al. does not show the interlocking member has a center, which is spaced, apart from the center of each adjacent interlocking member by a distance of one foot and each interlocking member is two inches long. These dimensions are obvious design choices to make the panels compatible with the rest of the building materials.

Vaughan et al. in view of Doran does not show the first interlocking member is a male interlocking member and the second interlocking member is a female interlocking member wherein the upper surface of the first and second insulating panel have a series of male projections and the lower surface of the first and second insulating panel have a series of corresponding female notches. Horobin shows the first interlocking member is a male interlocking member (43) and the second interlocking member is a female interlocking member (46) wherein the upper surface of the first and second insulating panel have a series of male projections (43) and the lower surface of the first and second insulating panel have a series of corresponding female notches (46). It would have been obvious to one of ordinary skill in the art at the time the present

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invention was made to use male projections and female notches as in Horobin in the structure of Vaughan in view of Doran to connect the forms.

Regarding claim 14, Vaughan in view of Doran shows straight panels. (Fig. 14)

Claims 11, 12, are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaughan et al. in view of Doran in further view of Moore, Jr.

Vaughan et al. in view of Doran shows the basic claimed structure. Vaughan et al. in view of Doran does not show a corner insulating unitary panel with a long and short leg. Moore, Jr. shows a corner insulating unitary panel (39) (Col. 10, Line 45-50) with a long and short leg. (Fig. 1) It would have been obvious to one of ordinary skill in the art at the time the present invention was made to use a corner insulating unitary panel as in Moore, Jr. in the structure of Vaughan et al. in view of Doran to form concrete corners. Dimensions of the corner form would be an obvious design choice to conform to standard building components.

Claims 15, 16, are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaughan et al. in view of Doran in further view of Horobin in still further view of Moore, Jr.

Vaughan et al. in view of Doran in further view of Horobin shows the basic claimed structure. Vaughan et al. in view of Doran in further view of Horobin does not show a corner insulating unitary panel with a long and short leg. Moore, Jr. shows a corner insulating unitary panel (39) (Col. 10, Line 45-50) with a long and short leg. (Fig. 1) It would have been obvious to one of ordinary skill in the art at the time the present invention was made to use a corner insulating unitary panel as in Moore, Jr. in the

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structure of Vaughan et al. in view of Doran in further view of Horobin to form concrete corners. Dimensions of the corner form would be an obvious design choice to conform to standard building components.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Martin et al. shows a concrete forming system with brace ties. Cormier reveals web for insulated concrete form.

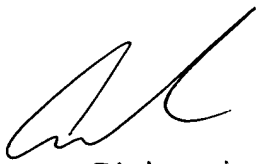
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve M Varner whose telephone number is 703 308-1894. The examiner can normally be reached on M-F 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl D Friedman can be reached on 703 308-0839. The fax phone numbers for the organization where this application or proceeding is assigned are 703 305-7687 for regular communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308-1113.

SV
May 15, 2003


Carl D. Friedman
Supervisory Patent Examiner
Group 3600